

WEST Search History

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DATE: Tuesday, November 29, 2005

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|--------------------------|----------|---|-----------|
| | | <i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i> | |
| <input type="checkbox"/> | L7 | l1 same (graft or grafted) | 0 |
| <input type="checkbox"/> | L6 | l1 with (graft or grafted) | 0 |
| <input type="checkbox"/> | L5 | L2 with l1 | 14 |
| <input type="checkbox"/> | L4 | L2 same l1 | 40 |
| <input type="checkbox"/> | L3 | L2 and l1 | 289 |
| <input type="checkbox"/> | L2 | (fused or fusion or hybrid or chimer\$) | 660883 |
| <input type="checkbox"/> | L1 | bacteriorhodopsin or halorhodopsin | 664 |

END OF SEARCH HISTORY

FILE 'MEDLINE, BIOSIS' ENTERED AT 14:08:56 ON 29 NOV 2005

| | |
|----|---|
| L1 | 6360 S BACTERIORHODOPSIN OR PHOBORHODOPSIN OR HALORHODOPSIN |
| L2 | 442060 S (FUSED OR FUSION OR HYBRID OR CHIMER?) |
| L3 | 142 S L1 AND L2 |
| L4 | 85 DUP REM L3 (57 DUPLICATES REMOVED) |
| L5 | 75574 S (G-PROTEIN OR GPCR OR (SEVEN TRANSMEMBRANE) OR HEPTAHELICAL O |
| L6 | 15 S L5 AND L3 |
| L7 | 8 DUP REM L6 (7 DUPLICATES REMOVED) |
| L8 | 9 S L1 AND (GRAFT OR GRAFTED) |
| L9 | 5 DUP REM L8 (4 DUPLICATES REMOVED) |

ANSWER 2 OF 15 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2002205234 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11937056
TITLE: Grafting segments from the extracellular surface of CCR5 onto a **bacteriorhodopsin** transmembrane scaffold confers HIV-1 coreceptor activity.
AUTHOR: Abdulaev Najmoutin G; Strassmaier Timothy T; Ngo Tony; Chen Ruiwu; Luecke Hartmut; Oprian Daniel D; Ridge Kevin D
CORPORATE SOURCE: Center for Advanced Research in Biotechnology, National Institute of Standards and Technology and The University of Maryland Biotechnology Institute, Rockville, MD 20850, USA.
CONTRACT NUMBER: EY13286 (NEI)
GM39589 (NIGMS)
GM56445 (NIGMS)
SOURCE: Structure (Cambridge, Mass. : 2001), (2002 Apr) 10 (4) 515-25.
Journal code: 101087697. ISSN: 0969-2126.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200211
ENTRY DATE: Entered STN: 20020409
Last Updated on STN: 20021211
Entered Medline: 20021120

AB Components from the extracellular surface of CCR5 interact with certain macrophage-tropic strains of human immunodeficiency virus type 1 (HIV-1) to mediate viral fusion and entry. To mimic these viral interacting site(s), the amino-terminal and extracellular loop segments of CCR5 were linked in tandem to form concatenated polypeptides, or grafted onto a seven-transmembrane **bacteriorhodopsin** scaffold to generate several **chimeras**. The **chimera** studies identified specific regions in CCR5 that confer HIV-1 coreceptor function, structural rearrangements in the transmembrane region that may modulate this activity, and a role for the extracellular surface in folding and assembly. Methods developed here may be applicable to the dissection of functional domains from other seven-transmembrane receptors and form a basis for future structural studies.